

CUMBERLAND MUNICIPAL UTILITY

Charles Christensen,
General Manager

March 28, 2011

Dear Senators and Representatives
of the State of Wisconsin:

RE: SENATE BILL 19, ASSEMBLY BILL 23

We would like to take this opportunity to thank you for signing on and co-sponsoring the above bills. Senate Bill 19 and Assembly Bill 23 are of the utmost importance to our small community in northwest Wisconsin. Cumberland is proud of its drinking water supply and quality, as most communities in northern Wisconsin are. It was a memorable moment for our community last year, when it was chosen by the Rural Water Association as having the 3rd Best Tasting Water in the State of Wisconsin.

In most small communities, the certified waterworks operators are known on a personal level by many of its citizens. We can assure you that in Cumberland, along with all of the other operators that we know, none of the operators or the communities that they represent, take a chance on not disinfecting their systems if they had a proven reason to do so. All of the small communities currently have some form of emergency disinfection available to them, as per DNR rules.

Continuous disinfection of water systems is a much different situation, as it requires more sophisticated monitoring equipment, added storage for chemicals, the possibilities of adding additional chemical treatment for such things as Manganese, that may be currently present but will be intensified by the additional disinfection. Continuous chlorination brings a "continuous expense" to small utilities and communities that are already currently struggling under budget constraints.

When the DNR rule for continuous disinfection of all water systems was passed, members of the Senate indicated that cities affected by the rule would be in a position to receive DNR funding to mitigate the impact on local budgets. We made application for funding, however that response has not been forthcoming from the DNR.

We were also assured that should we utilize a UV disinfectant system, the DNR rule requiring minimum continuous chlorination could be waived. We have not received any assurances that this is a fact.

WI Senators & Representatives

March 24, 2011

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Northern Wisconsin has long been an attraction for tourists, due to its pristine waters, abundant wildlife and public lands. Chlorine tasting water does not seem to have a place in this setting. Many of our citizens have approached us, stating the cost of purchasing bottled water and water filtration systems to remove the chlorination puts additional stress on already tight personal budgets.

If we were assured that we were putting our customers in danger of a health risk by not continuously chlorinating or disinfecting our water system, we would feel that we should take immediate action to correct it and not wait two to three years for the rule to take affect. However, we do also believe that if this was a serious health risk, it would be affecting private wells and private water systems, such as mobile home parks, camp grounds, etc., and that the EPA would require it nation wide. This is not the case.

We have included an article addressing disinfection by-product challenges in drinking water, which highlights some of the effects that can be encountered with chlorination of a water supply. We have also included our "response" to comments made at a DNR Liaison Committee Meeting earlier in reference to these bills.

Thank you, once again, for supporting these important bills.

Very truly yours,



Charles Christensen, Manager
Cumberland Municipal Utility

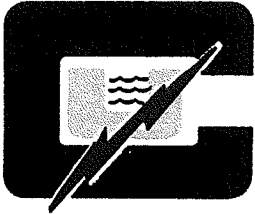
Very truly yours,



Dean Bergstrom, Chief Operator
Cumberland Municipal Utility

CC/DB/kh

Enc.



CUMBERLAND MUNICIPAL UTILITY

Charles Christensen,
General Manager

March 24, 2011

RESPONSE TO DNR COMMENTS ON ASSEMBLY BILL 23 & SENATE BILL 19

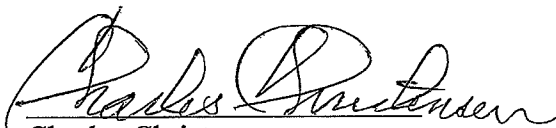
It is our understanding that at the DNR Liaison Committee Meeting, Mr. Lee Boushon of the DNR, raised concerns that this legislation would go further than the proposed rule. Mr. Boushon's concern indicated that the DNR can now allow a well to be used with insufficient casing, if disinfection is provided. Under the Rule, the DNR could not mandate disinfection in these types of scenarios. Therefore the DNR would not be able to give utilities the flexibility to have or use different construction or treatment.

We believe this is in error, as the EPA Groundwater Rule allows States to determine the frequency of monitoring/sampling of groundwater sources, based on the history of testing and the degree of risk for the system to have non-compliant water quality. If non-compliant water quality is found, the Groundwater Rule gives States the authority to require immediate corrective action.

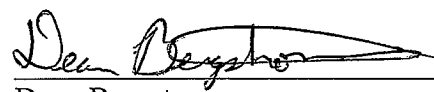
In the response to the statement that the DNR would not be able to mandate disinfection in cases where insufficient well casing is provided, there are a few different issues. Although the DNR could not require disinfection for the simple reason that the casing is more shallow, they could require additional/more frequent sampling of the groundwater, because this could be considered a high risk situation. If any of the groundwater samples were found to be unsafe, the DNR could then mandate disinfection, or order other immediate corrective action.

Therefore, it would appear as though the concerns expressed by the DNR are addressed within the EPA Groundwater Rule, which is in effect at the national level.

Sincerely,


Charles Christensen
General Manager

Sincerely,


Dean Bergstrom
Certified Waterworks Operator

Addressing Disinfection By-Product Challenges in Drinking Water

By Leo Zappa and William Zavora

For over one hundred years, the predominant disinfectant chemical has been chlorine. While a highly effective disinfectant, chlorine has been found to react with naturally occurring matter (NOM) in the water to form disinfectant by-products (DBPs). DBPs have been linked to a number of human health concerns and have been regulated by the United States EPA. Public water system operators will soon face compliance with the U.S. EPA's Stage 2 Disinfectants and Disinfectant By-products Rule (US-EPA Stage 2 DBPR). Specifically, water utilities will be required to achieve locational running annual averages of 80 ug/l for total trihalomethanes (TTHM) and 60 ug/l for haloacetic acids (HAA5) starting in 2012.

One of the methods employed by some water utilities to come into compliance with US-EPA Stage 2 DBPR is to switch disinfectant chemicals, moving away from chlorine and converting to alternative means of disinfection such as chloramine. It is known that chloramines can provide satisfactory disinfection while producing lower levels of TTHMs and HAA5s. However, recent research has discovered that use of the alternate disinfectant,

while reducing the levels of the currently regulated DBPs, can have unintended consequences. Specifically, the use of chloramines can lead to the formation of new classes of DBPs.

These emerging, and currently unregulated DBPs, can include nitrogen and iodine-based compounds (N-DBPs, Iodo-DBPs). Examples of these new DBPs include iodo acids such as iodoacetic acid, iodo-THMs such as dichloriodomethane, haloaldehydes, halomides, and NDMA. The formation potential of these emerging DBPs is enhanced by the increased use of impaired waters as supplies of pristine waters decrease. Impaired waters can encompass such factors as the impact of wastewater (including the reuse of wastewater in states such as Florida and California) and algal growth. Impaired waters often have heightened levels of organic nitrogen, which provides precursors for nitrogenous DBPs.

The major concern regarding these new classes of DBPs is their toxicity to humans. Current research is focused on determining the cytotoxicity and genotoxicity of these emerging DBPs. Cells exposed to a cytotoxic compound can suffer necrosis, where the cell membrane loses integrity and dies. In contrast, cells exposed to genotoxic compounds can suffer genetic mutations, which can in turn lead to the formation of cancerous tumors.

A number of the emerging N-DBPs and iodo-DBPs appear to be significantly more genotoxic and cytotoxic than the currently regulated TTHMs

and HAA5s. Examples include halonitromethanes, which appear to be up to 10 times more cytotoxic than regulated THMs, and iodo-acids, which have been shown to be twice as genotoxic as the currently regulated DBPs.

Due to the competing demands to provide safe, disinfected drinking water to their customers while at the same time meeting current DBP regulations and limiting the formation of emerging DBPs, municipal water providers are investigating other means to prevent or limit DBP formation. One such alternative approach is the removal of naturally occurring matter (NOM) from the water prior to adding disinfectant chemicals. By removing the organic precursors, the formation potential for DBPs, both regulated and emerging, is greatly reduced.

There are a number of technologies which have been evaluated and are now being employed by municipal water providers for precursor removal. Membrane filtration, activated carbon, and the enhanced coagulation process have emerged as the three most commonly applied technologies for NOM reduction. All three of these technologies have been thoroughly researched for their effectiveness relative to NOM reduction, and there are numerous technical papers which describe how these technologies can be applied to help municipalities meet their Stage 2 DBPR compliance requirements.

A key feature common to these technologies is that they are able to accomplish the goal of meeting cur-

rent DBP regulations without any detrimental side-effects, such as the formation of emerging disinfection by-products. Another point worth noting is that each of these technologies and processes were originally developed to accomplish other water quality goals, but have been repurposed to provide a solution to the Stage 2 DBPR challenge.

Municipal water providers are presented with the dilemma of balancing the need for supplying disinfected water with the prevention of forming hazardous disinfection by-products. Short term solutions such as switching disinfectant chemicals may be relatively inexpensive and easy, but can create as many problems as they solve. The long term solution to this challenge should be to encourage the water industry to research and develop innovative approaches to applying new and existing technologies. Emphasis should be placed on those technologies and processes that reduce or remove contaminants and precursor compounds from water in lieu of adding more chemicals to our drinking water. ●

Testimony of Mark A. Borchardt, PhD, regarding SB19 and AB23 (to prohibit DNR from requiring a municipal water system to provide continuous disinfection of the water that it provides, unless continuous disinfection is required under federal law.)

March 29, 2011

My name is Mark Borchardt. I am a Research Microbiologist with more than 30 years of research experience. My specialty is waterborne infectious disease, and I am the Principal Investigator of the Wisconsin Water And Health Trial for Enteric Risks (called the WAHTER Study), the key study that led to the DNR rule requiring mandatory disinfection of municipal drinking water. The study was performed while I was employed at the Marshfield Clinic, but today I am speaking on my own behalf.

The primary objective of the Wisconsin WAHTER Study was to estimate the fraction of acute gastrointestinal illness, that is vomiting and diarrhea, caused by groundwater contaminated with human viruses. The research question was similar to other medical research where one asks if a potential exposure has a health risk. For example, if people stopped smoking in Wisconsin how many fewer cases would there be of lung cancer? We asked if groundwater-borne transmission of viruses was stopped, how many fewer cases would there be of gastrointestinal illness?

To answer this question we received permission from 14 Wisconsin communities to install ultraviolet light disinfection on their municipal wells. In the first study year one-half of the communities had the UV disinfection installed and the other communities served as controls. For two 12-week periods, 40 to 70 families in every community, consisting of 1,659 people in 621 households, completed a symptom checklist and mailed this to the study team every week. In the second year, the UV disinfection units were switched so the original control communities had the UV intervention and the original intervention communities became the controls. We again tracked illness symptoms for two 12-week periods using the same families as the first year. In addition, we measured the virus levels in the households' tap water.

What did we find? First, all 14 communities had human viruses in their well water sometimes at very high levels. Using tracers of wastewater, like detergents and cholesterol, we showed the likely virus source is leaking sanitary sewers. Second, there was a very strong relationship between the levels of viruses we measured in household tap water and rates of illness in the communities. In other words, the communities that had the highest virus levels in their tap water were also the sickest. In the community with the highest virus levels gastrointestinal illness increased 87% to 2.8 episodes/person-year from 1.5 episodes/person-year when viruses were absent in tap water. Third, when the UV disinfection was in place the overall reduction in illness among the communities was 13%. In the fall of 2006, when a particularly virulent virus was present in the wells, we estimate 29% of the illness in the communities was attributable to their drinking water.

This was a Cadillac study using the best methods available. Viruses were measured by sensitive and specific DNA tests. The epidemiological study design was not observational, it was experimental; we evoked a cause, installing UV disinfection, and we measured the effect, a reduction in illness. The health data was gathered not retrospectively, it was collected prospectively every week using a standardized symptom checklist. I have heard the criticism that people have talked to their friends and maybe some

nurses they know at the local hospital and no one has seen anyone get sick from the water. These anecdotes cannot compare with active disease surveillance and the data we collected from 75,000 weekly symptom checklists.

The Wisconsin Department of Administration estimates without passage of the Bills the one-time government cost to upgrade disinfection equipment is \$634,800 and the annual operating cost for disinfection is \$130,200. How does this compare with the costs of gastrointestinal illness? A recent study by the Centers for Disease Control and Prevention (CDC) estimates the national cost for diarrheal disease in children less than 5 years old (1). These data can be extended to American adults 18 to 54 years old because we know in this adult age group the prevalence and severity of gastrointestinal illness is not much lower than that for young children (2). Among people with acute gastrointestinal illness the CDC reports the national hospitalization rate is 0.5%, the emergency room visit rate is 1.8%, and the outpatient visit rate is 13.3%. The national median payments for gastrointestinal illness treatment by hospitalization, ER visit, and outpatient is \$3135, \$332, and \$90, respectively. Let's say the total population of the 66 non-disinfecting communities in Wisconsin is 100,000. (I believe this is a safe estimate given the total population of the 14 WAHTER Study communities is 46,509.). If the baseline gastrointestinal illness rate is 1.2 episodes/person-year, then the 13% reduction measured in the WAHTER Study means a reduction of 0.16 episodes/person-year, which for a 100,000 population means 16,000 illnesses are prevented. Using the CDC numbers, the health care costs avoided is \$538,000 per year!

Over a 5 year period, the cost of disinfection would be roughly 1.3 million; the healthcare costs saved would be at least 2.7 million.

This health care cost only includes direct payment to healthcare providers. It does not include the costs of work lost either by the ill person or their caregiver nor does it include the cost of death. The estimate also does not consider the most vulnerable populations, the immunocompromised and elderly.

Please also recognize the Wisconsin WAHTER Study dealt with the most easily measured health outcome, acute gastrointestinal illness. The viruses we identified in the 14 communities drinking water cause a variety of acute illnesses: (e.g. fever, conjunctivitis, aseptic meningitis, hand foot mouth disease) that may be mild to severe to fatal. Although less prevalent, these viruses also cause chronic conditions that may involve the heart, the nervous system, or liver.

Based on the epidemiological data from the WAHTER Study, the many scientific studies showing widespread virus occurrence in our nation's groundwater, and the fact, widely accepted among medical professionals, that these viruses are pathogenic agents capable of causing human disease, in my professional opinion, in the municipal drinking water systems that do not disinfect there is significant waterborne disease transmission.

1. Cortes JE, Curns AT, Tate JE, Parashar UD (2009) Trends in healthcare utilization for diarrhea and rotavirus disease in privately insured US children <5 years of age, 2001-2006. *Pediatr Infect Dis J* 28:874-878.
2. Jones TF et al. (2006) A population-based estimate of the substantial burden of diarrhoeal disease in the United States; FoodNet, 1996-2003. *Epidemiol Infect* 135:293-301.



Village of Hammond

455 Davis Street • Upper Level • P.O. Box 337 • Hammond, WI • 54015
Phone: 715-796-2727 • Fax: 715-796-2791

March 28, 2011

TO: Senate Committee on Judiciary, Utilities, Commerce, and Government Operations

FROM: Vincent Trudell, President, Village of Hammond

RE: Public Hearing on Senate Bill 19 to repeal the DNR mandate to require municipalities to continuously disinfect their water supplies and only require continual disinfection when required under federal law

I am writing to express my support for passage of Senate Bill 19 to repeal the referenced DNR mandate.

Hammond is one of numerous communities in Wisconsin that has not had to continuously disinfect its water. The Village of Hammond has a long tradition, spanning more than seven decades, of providing its residents with safe, great-tasting, high quality water.

Last summer, the Village's Public Works Director (Rod Turk), a Village Trustee (Steve Peterson) and our Village Attorney (Tim Scott) attended and testified at a public hearing on the proposed legislation which would mandate continuous disinfection of all municipal systems.

After attending the hearing, it became clear to the named village representatives that the proposed continuous disinfection requirement was unwise and unwarranted for several reasons:

- 1) The basis for the proposal was only one study conducted by Mark Borchardt of the Marshfield Clinic Research Foundation. This study apparently revealed that certain viruses can be present in ground water – viruses which have most likely been present for decades. There is no certainty that these viruses present significant health issues for those who drink the water. Additional research should be conducted before mandating this drastic and overbroad response.
- 2) The proposed rule only mandated continuous disinfection *at the well* – not in *the distribution lines* – a common entry point for contaminants. Thus the proposed rule itself is defective.
- 3) DNR assertions notwithstanding, the only financially viable option to comply with the disinfection mandate for many smaller communities will be through the use of chlorine. In preparing for the hearing, our village representatives came across a great deal of research suggesting a link between long-term exposure to chlorine and various cancers and other human diseases.
- 4) Recent events in Madison have made it clear that Wisconsin municipalities face major reductions in shared revenue from the State. Unfunded mandates such as this one will only exacerbate an extremely bleak financial picture in which municipal boards struggle to provide the same level of essential services to their residents with significantly reduced State aid.



Village of Hammond

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- 5) Mr. Borchardt's study found evidence of occasional intestinal disorders (upset stomach, diarrhea, etc.) likely due to groundwater contaminants. We believe the fundamental question at issue here is this: **which is the greater threat to public health – contaminants which might cause occasional intestinal disorders in a limited number of users of the water system, or mandated continuous and long-term exposure to all users of the system to a powerful disinfecting chemical – chlorine?** We believe a proper balancing of the risk/benefit factors present here weigh against requiring continual disinfection in communities like Hammond.
- 6) Chlorination will also expose Village employees who must perform the actual disinfection to that and other chemicals which have additional adverse health consequences.

The Village of Hammond has all the necessary equipment to chlorinate its water in the event of an emergency or if any test ever indicated the need to do so. The DNR mandate forces a municipality with an established history of good quality water to add chemicals which would dramatically affect its taste and will result in long-term continuous exposure to all of our residents to a powerful disinfecting chemical.

Eleven percent of the municipal wells in Wisconsin currently are not required to continually disinfect their municipal water systems. The reason is because they produce good quality, safe drinking water for their residents. The DNR's broad-brush mandate is unnecessary and will result in the introduction of powerful chemicals into systems that have no need for them. At a minimum, the rule should contain an exception for municipalities like Hammond which have an established history of high quality, safe drinking water.

For the reasons stated, the Village of Hammond strongly supports passage of Senate Bill 19. Because this issue is so important to us, I have directed that the Village's Public Works Director Rod Turk appear at the Public Hearing before this Senate Subcommittee to speak in support of repealing the DNR mandate and only requiring continual disinfection when required under federal law.

If you wish to discuss this matter further, please contact me.

Vince J. Trudell

Vince Trudell

Village President

715-796-2727

presidenttrudell@centurytel.net

Testimony of Kenneth R. Bradbury, PhD, regarding SB19 and AB23 (to prohibit DNR from requiring a municipal water system to provide continuous disinfection of the water that it provides, unless continuous disinfection is required under federal law.)

March 29, 2011

Good morning. My name is Kenneth Bradbury. I am a professional groundwater geologist with the Wisconsin Geological and Natural History Survey, UW-Extension. I have a PhD in hydrogeology and over 30 years of experience in water resources issues, including water quality studies, in Wisconsin. Over the last several years I have helped inform the legislature on groundwater issues on a number of occasions, and continue to be available as a resource. I am here today to offer some perspective on this proposed legislation.

Of all the means that society uses to protect and improve human health, disinfection of water supplies is among the simplest and most cost-effective. Historically, water disinfection has led to enormous improvements in the human condition throughout the world. One only needs to travel to an undeveloped country where "you can't drink the water" to be reminded how we take good water quality for granted here in Wisconsin.

Over the past decade scientists in Wisconsin (including me) have conducted research on the presence of infectious viruses in groundwater. Results of these studies have been, and continue to be, published in scientific papers, but can be summarized simply as follows:

1. Human viruses, probably originating from sewage effluent, are present in water pumped from municipal wells in many parts of Wisconsin, including right here in Madison. These viruses can sometimes be infectious, and can cause gastro-intestinal illness in people.
2. These viruses are not the same as the bacteria commonly tested for by municipal water utilities; the absence of bacteria does not necessarily indicate that water is virus-free. Most water utilities do not test for viruses because virus testing is not required and only recently became available.
3. A recent EPA-funded study on 14 small communities in Wisconsin has shown that about 15% of **current** gastro-intestinal illness in these communities can be directly attributed to consumption of non-disinfected municipal water.
4. Disinfection of water is relatively easy and can be accomplished by several methods including chlorination, ultra-violet light, reverse osmosis, or ozone treatment.

Currently, at least ⁶⁶~~44~~ Wisconsin communities do not disinfect municipal drinking water supplies. In spite of our natural desire to think of subsurface water resources as "pure", our research shows that this is not the case, especially in populated areas where many contamination sources exist.

Based on this work, we have been recommending that all municipal water systems disinfect the water they serve out to consumers.

For this reason I can not recommend passage of the proposed legislation in SB19 and AB23.

Water disinfection is a good idea, is sound public policy, and will improve the health of Wisconsin citizens.

I am happy to respond to any questions you may have and offer our assistance to the legislature as you consider these issues.



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E-mail: league@lwm-info.org
www.lwm-info.org

To: Senate Committee on Judiciary, Utilities, Commerce & Government Operations
From: Curt Witynski, Assistant Director, League of Wisconsin Municipalities
Date: March 29, 2011
Re: SB 19, Repealing Mandatory Disinfection of Municipal Water Systems Served by Groundwater

The League of Wisconsin Municipalities supports SB 19 and the proposed amendment to the bill.

DNR recently promulgated NR 810.09(2), a rule requiring municipal drinking water systems served by groundwater to provide continuous disinfection of the water that they provide, beginning no later than December 1, 2013.

SB 19 prohibits DNR from requiring a municipal water system to provide continuous disinfection of the water that it provides, unless continuous disinfection is required under federal law or unless water quality data indicates a potential health hazard.

We opposed the mandatory disinfection rule when it was promulgated because it would apply even if tests consistently show no bacterial or viral contamination of the water supply. The mandate would apply even if, historically, the community's water was colorless, great tasting, and free of bacterial or viral contamination.

The Department passed the rule despite the fact that federal rules do not require continuous disinfection of groundwater systems. Moreover, none of our neighboring states, except Illinois, require mandatory disinfection of municipal water systems served by groundwater.

The mandatory disinfection rule will require 71 municipal water systems that do not currently disinfect to do so. According to department estimates, complying with the mandatory disinfection rule will force these 71 communities to spend at least \$700,000 towards new equipment and other one-time costs. Annual costs for these 71 systems will increase by \$40,000.

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The burden of paying these additional costs will fall on municipal water customers, who very likely are already paying higher property taxes, stormwater utility fees, and sewer charges. The mandated additional costs could not come at a worse time for these communities which are facing shared revenue cuts and are barely beginning to recover from the worst economic downturn since the Great Depression.

Municipal governing bodies and utility commissions are in the best position to weigh the health benefits gained against the cost, impact on taste, and potential risks of continuously chlorinating the water supply. Absent specific evidence that a municipal water system is vulnerable to bacterial or viral contamination, the decision to continuously disinfect should remain a local decision.

We urge you to recommend passage of SB 19 as amended by Senate Amendment 1.

Thanks for considering our comments.

Lakeland Sanitary District No. 1

(715) 356-4454
Phone

8780 Morgan Road
MINOCQUA, WI 54548-9797

(715) 358-8830
Fax

March 28, 2011

Dear Senator Holperin,

We would like to thank you for sponsoring Senate Bill 19 which if made into law would restrict mandatory disinfection of drinking water unless required by the federal government.

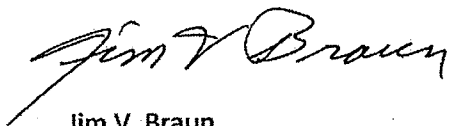
We believe our main function as a utility is to provide a safe, reliable and affordable supply of drinking water to the communities we serve. Under the Safe Drinking Water Act we are required to test for a variety of potential contaminants including coliform bacteria. In the event of a positive coliform sample in the distribution system we are also required to test all three of our wells for potential bacteriological contamination. In the event a repeat water sample comes back positive, emergency chlorination would begin until the source of contamination was found and repeat samples were negative. Great care is taken by the utility to minimize any potential contamination.

The main emphasis in changing NR 810 to require mandatory disinfection was the possibility of viruses entering the drinking water. The Safe Drinking Water Act currently does not require testing for viruses. Contaminants that are required to be tested have Maximum Contaminate Levels to establish a threshold level for treatment. Water systems are all different and a contaminate affecting one system might not be an issue in another.

We basically have two options to comply with the mandatory disinfection requirement, chlorination and UV disinfection. Capital costs for UV to outfit our three well houses are around \$300,000, almost as much as our yearly budget for the water system and that does not include operation and maintenance costs. Chlorination is the only economically viable option. Even though we currently have emergency chlorination we will have some up front capital costs to make the system permanent. We will also see an increase in operational and maintenance costs. In addition laboratory costs will rise to comply with the disinfection byproduct rule.

Sincerely,

Lakeland Sanitary District No.1 Board of Commissioners



Jim V. Braun
President



Tom Wipperfurth
Treasurer



Rick Schroeter
Clerk

E-mail: sandist@nnex.net

SERVING MINOCQUA • WOODRUFF • ARBOR VITAE AREA

President: Joseph Edelman
Trustees: George Campbell
Dale Kangas
Mary Schiefelbein

Village of White Lake

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March 28, 2011

Senator Jim Holperin
Representative Jeffrey Mursau

RE: 2011 Senate Bill 19

The purpose of this letter is to show our support for Senate Bill 19; one of the board trustees and a village employee will be attending the hearing on Tuesday, March 29.

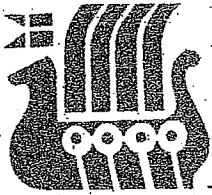
The village board does not agree with passing a generic bill mandating continuous disinfecting; but rather, the disinfecting be done only if required under federal law. With state cuts looming under the Walker budget bill to reduce shared revenues, why add to them by including all municipalities, regardless of having a history of water that is colorless, great tasting, and free of bacterial or viral contamination. The cost impact on a small community such as ours cannot be justified; our water is already tested on a regular basis, surpassing the testing standards.

The Village of White Lake strongly supports Senate Bill 19 and Assembly Bill 23, repealing the continuous disinfection mandate.

Sincerely,

Village of White Lake
Board of Trustees





VILLAGE OF WOODVILLE

March 28, 2011

Dear Senate Committee on Judiciary, Utilities, Commerce, and Government Operations,

I am writing to you today asking you to support Senate Bill 19 related to disinfection of municipal water supplies.

I work for a community that does not continuously disinfect their water supply and I feel the current "one size fits all" approach to disinfection is not right. Our local elected leaders should have the option to work with the DNR and decide what is best for their community.

Sincerely,

Daniel R. Peterson
Village of Woodville, Director of Public Works

Village of Clear Lake

OFFICE OF CLERK-TREASURER
350 4th Avenue, PO Box 48
Clear Lake, Wisconsin 54005

March 28, 2011

Senate Bill repealing DNR requirement for mandatory disinfection of municipal water systems.

The Village of Clear Lake is located in Polk County in Northwest Wisconsin. Our population is about 1,140. We support the Senate Bill repealing the DNR requirement for mandatory disinfection of municipal water systems. We currently do not disinfect our water system because we have clean fresh water that our residents enjoy.

Disinfection of our water systems on a continuous basis would create a financial hardship for us. We currently have two wells that supply water to our municipality. We currently have equipment to disinfect our water supplies on a temporary basis. However, to change to a continued basis, would require modifications to both well houses and disinfection equipment, along with construction of new storage areas for storage for hazardous materials. Estimated cost would be \$250,000 – \$500,000. In addition, the possibility exists of having to remove any chlorine in wastewater during the waste treatment process and prior to discharge of the water back into the surface water sources. This would be another cost to our residents. This would create a financial hardship on our residents especially at a time when budgets are already stretched to the limit.

The largest employer in Clear Lake is AFP – Advanced Food Products. They employ about 125 people from the community. They are a large food manufacturer. When they are in full production mode, they will use over a million gallons of water per day. The addition of disinfection agents to the water will have an adverse effect on them. They will have to remove the disinfection agents or run expensive tests to determine its effect on their food products. Also, almost half the water AFP uses is non-contact cooling water which is currently discharged to our lake. They will have to install removal equipment to prevent discharge of the chloride to the lake. This will be a large expense for them. It could possibly make them consider moving their plant to another state.

Once again, we support the Senate Bill repealing the DNR requirement for mandatory disinfection of municipal water systems. Current rules would, and do, regulate our water systems appropriately, should the need arise to disinfect a municipal water system. Thank you for providing a public hearing for us to express our point of view.

Thank you, once again, for your consideration of this matter.

Sincerely,

Albert Bannink
Village Clerk – Treasurer
Village of Clear Lake

-----Original Message-----

From: Kristina Handt [mailto:volkristina@lakeland.ws]

Sent: Monday, March 28, 2011 10:58 AM

To: Sen.Harsdorf

Subject: Re: Note from Sen. Harsdorf on water supply disinfection legislation

Dear Senator Harsdorf,

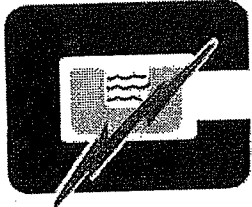
Thank you for the update on your legislation.

This is very timely for our community as just last week the Luck Water and Sewer Commission heard a proposal from our engineers to meet the DNR imposed requirements of continuous disinfection. They estimated the cost of the project to be \$500,000 to upgrade our two small well houses. At \$250,000 a piece, which is more than most residences are valued at in Luck, I'm sure you could understand our sticker shock. Even though we were told our project would receive an extra 400 points under the Safe Drinking Water Loan Program (SDWLP) because it met the disinfection requirements of the DNR and would put us in a good position to receive a very low interest loan, the Water and Sewer Commission decided not to submit a SDWLP application as it still would require a substantial increase in water rates for our customers. In these economic times, even the smallest increase in fees is a burden. Furthermore, to increase fees for a problem that doesn't exist (Luck provides safe water to our customers without continuous disinfection) seems foolish.

We are taking a risk by not pursuing the SDWLP funding as it may cost us more if the requirement is not repealed and we have to proceed with this spending in the future but we are counting on you and Rep. Severson to repeal the DNR's requirement. I regret I will not be able to attend the hearings this week, but please keep me updated on the progress of your legislation.

Thank you for your work on this issue.

Kristina Handt
Village Administrator
Village of Luck
401 Main Street
PO Box 315
Luck, WI 54853-0315
715-472-2221
715-472-2214 fax



CUMBERLAND MUNICIPAL UTILITY

Charles Christensen,
General Manager

March 24, 2011

Dear Senators and Representatives
of the State of Wisconsin:

RE: SENATE BILL 19, ASSEMBLY BILL 23

We would like to take this opportunity to thank you for signing on and co-sponsoring the above bills. Senate Bill 19 and Assembly Bill 23 are of the utmost importance to our small community in northwest Wisconsin. Cumberland is proud of its drinking water supply and quality, as most communities in northern Wisconsin are. It was a memorable moment for our community last year, when it was chosen by the Rural Water Association as having the 3rd Best Tasting Water in the State of Wisconsin.

In most small communities, the certified waterworks operators are known on a personal level by many of its citizens. I can assure you that here, in Cumberland, along with all of the other Operators that I know, none of the operators or the communities that they represent, take a chance on not disinfecting their systems if they had a proven reason to do so. All of the small communities currently have some form of emergency disinfection available to them, as per DNR rules.

Continuous disinfection of water systems is a much different situation, as it requires more sophisticated monitoring equipment, added storage for chemicals, the possibilities of adding additional chemical treatment for such things as Manganese, that may be currently present but will be intensified by the additional disinfection. Continuous chlorination brings a "continuous expense" to small utilities and communities that are already currently struggling under budget constraints.

When the DNR rule for continuous disinfection of all water systems was passed, members of the Senate indicated that cities affected by the rule would be in a position to receive DNR funding to mitigate the impact on local budgets. We made application for funding, however that response has not been forthcoming from the DNR.

We were also assured that should we utilize a UV disinfectant system, the DNR rule requiring minimum continuous chlorination could be waived. We have not received any assurances that this is a fact.

WI Senators & Representatives
March 24, 2011
Page 2

Northern Wisconsin has long been an attraction for tourists, due to its pristine waters, abundant wildlife and public lands. Chlorine tasting water does not seem to have a place in this setting. Many of our citizens have approached us, stating the cost of purchasing bottled water and water filtration systems to remove the chlorination puts additional stress on already tight personal budgets.

If we were assured that we were putting our customers in danger of a health risk by not continuously chlorinating or disinfecting our water system, we would feel that we should take immediate action to correct it and not wait two to three years for the rule to take affect. However, we do also believe that if this was a serious health risk, it would be affecting private wells and private water systems, such as mobile home parks, camp grounds, etc., and that the EPA would require it nation wide. This is not the case.

I have included an article addressing disinfection by-product challenges in drinking water, which highlights some of the effects that can be encountered with chlorination of a water supply. I have also included our "response" to comments made at a DNR Liaison Committee Meeting earlier in reference to these bills.

Thank you, once again, for supporting these important bills.

Very truly yours,

A handwritten signature in dark ink, appearing to read "Charles Christensen", written in a cursive style.

Charles Christensen, Manager
Cumberland Municipal Utility

CC/kh

Addressing Disinfection By-Product Challenges in Drinking Water

By Leo Zappa and William Zavora

For over one hundred years, the predominant disinfectant chemical has been chlorine. While a highly effective disinfectant, chlorine has been found to react with naturally occurring matter (NOM) in the water to form disinfectant by-products (DBPs). DBPs have been linked to a number of human health concerns and have been regulated by the United States EPA. Public water system operators will soon face compliance with the U.S. EPA's Stage 2 Disinfectants and Disinfectant By-products Rule (US-EPA Stage 2 DBPR). Specifically, water utilities will be required to achieve locational running annual averages of 80 ug/l for total trihalomethanes (TTHM) and 60 ug/l for haloacetic acids (HAA5) starting in 2012.

One of the methods employed by some water utilities to come into compliance with US-EPA Stage 2 DBPR is to switch disinfectant chemicals, moving away from chlorine and converting to alternative means of disinfection such as chloramine. It is known that chloramines can provide satisfactory disinfection while producing lower levels of TTHMs and HAA5s. However, recent research has discovered that use of the alternate disinfectant,

while reducing the levels of the currently regulated DBPs, can have unintended consequences. Specifically, the use of chloramines can lead to the formation of new classes of DBPs.

These emerging, and currently unregulated DBPs, can include nitrogen and iodine-based compounds (N-DBPs, Iodo-DBPs). Examples of these new DBPs include iodo acids such as iodoacetic acid, iodo-THMs such as dichloriodomethane, haloaldehydes, halomides, and NDMA. The formation potential of these emerging DBPs is enhanced by the increased use of impaired waters as supplies of pristine waters decrease. Impaired waters can encompass such factors as the impact of wastewater (including the reuse of wastewater in states such as Florida and California) and algal growth. Impaired waters often have heightened levels of organic nitrogen, which provides precursors for nitrogenous DBPs.

The major concern regarding these new classes of DBPs is their toxicity to humans. Current research is focused on determining the cytotoxicity and genotoxicity of these emerging DBPs. Cells exposed to a cytotoxic compound can suffer necrosis, where the cell membrane loses integrity and dies. In contrast, cells exposed to genotoxic compounds can suffer genetic mutations, which can in turn lead to the formation of cancerous tumors.

A number of the emerging N-DBPs and iodo-DBPs appear to be significantly more genotoxic and cytotoxic than the currently regulated TTHMs

and HAA5s. Examples include halonitromethanes, which appear to be up to 10 times more cytotoxic than regulated THMs, and iodo-acids, which have been shown to be twice as genotoxic as the currently regulated DBPs.

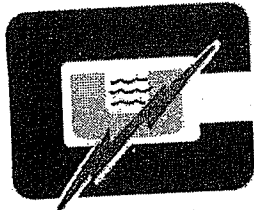
Due to the competing demands to provide safe, disinfected drinking water to their customers while at the same time meeting current DBP regulations and limiting the formation of emerging DBPs, municipal water providers are investigating other means to prevent or limit DBP formation. One such alternative approach is the removal of naturally occurring matter (NOM) from the water prior to adding disinfectant chemicals. By removing the organic precursors, the formation potential for DBPs, both regulated and emerging, is greatly reduced.

There are a number of technologies which have been evaluated and are now being employed by municipal water providers for precursor removal. Membrane filtration, activated carbon, and the enhanced coagulation process have emerged as the three most commonly applied technologies for NOM reduction. All three of these technologies have been thoroughly researched for their effectiveness relative to NOM reduction, and there are numerous technical papers which describe how these technologies can be applied to help municipalities meet their Stage 2 DBPR compliance requirements.

A key feature common to these technologies is that they are able to accomplish the goal of meeting cur-

rent DBP regulations without any detrimental side-effects, such as the formation of emerging disinfection by-products. Another point worth noting is that each of these technologies and processes were originally developed to accomplish other water quality goals, but have been repurposed to provide a solution to the Stage 2 DBPR challenge.

Municipal water providers are presented with the dilemma of balancing the need for supplying disinfected water with the prevention of forming hazardous disinfection by-products. Short term solutions such as switching disinfectant chemicals may be relatively inexpensive and easy, but can create as many problems as they solve. The long term solution to this challenge should be to encourage the water industry to research and develop innovative approaches to applying new and existing technologies. Emphasis should be placed on those technologies and processes that reduce or remove contaminants and precursor compounds from water in lieu of adding more chemicals to our drinking water.



CUMBERLAND MUNICIPAL UTILITY

Charles Christensen,
General Manager

March 24, 2011

RESPONSE TO DNR COMMENTS ON ASSEMBLY BILL 23 & SENATE BILL 19

It is our understanding that at the DNR Liaison Committee Meeting, Mr. Lee Boushon of the DNR, raised concerns that this legislation would go further than the proposed rule. Mr. Boushon's concern indicated that the DNR can now allow a well to be used with insufficient casing, if disinfection is provided. Under the Rule, the DNR could not mandate disinfection in these types of scenarios. Therefore the DNR would not be able to give utilities the flexibility to have or use different construction or treatment.

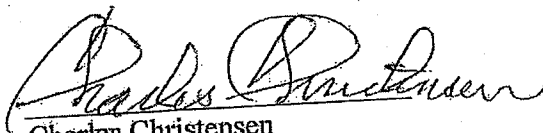
We believe this is in error, as the EPA Groundwater Rule allows States to determine the frequency of monitoring/sampling of groundwater sources, based on the history of testing and the degree of risk for the system to have non-compliant water quality. If non-compliant water quality is found, the Groundwater Rule gives States the authority to require immediate corrective action.

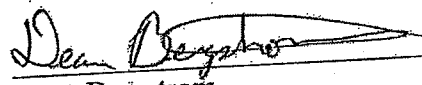
In the response to the statement that the DNR would not be able to mandate disinfection in cases where insufficient well casing is provided, there are a few different issues. Although the DNR could not require disinfection for the simple reason that the casing is more shallow, they could require additional/more frequent sampling of the groundwater, because this could be considered a high risk situation. If any of the groundwater samples were found to be unsafe, the DNR could then mandate disinfection, or order other immediate corrective action.

Therefore, it would appear as though the concerns expressed by the DNR are addressed within the EPA Groundwater Rule, which is in effect at the national level.

Sincerely,

Sincerely,


Charles Christensen
General Manager


Dean Bergstrom
Certified Waterworks Operator

Village of Balsam Lake

PO Box 506 404 Main Street
Balsam Lake WI 54810
715-485-3424 Fax 715-485-9339
vobl@lakeland.ws

March 25, 2011

Senator Sheila Harsdorf
Room 18 South, State Capitol
PO Box 7882
Madison WI 53707-7882

Dear Senator Harsdorf,

The Village has done a study of our water system including water quality. This study was conducted by Short Elliott Hendrickson (S.E.H.). Under section 2.6 of this study it states concerns with the proposed addition of chlorine and related problems that can occur, along with budgetary costs for a water treatment plant of approximately \$2.0 to \$2.5 million.

At our last meeting with SEH, they informed us in order to proceed in the right direction we should have a drinking water analyst conducted. The cost of this analyst is \$15,000.00.

This mandatory disinfection rule came about from studies conducted by Mr. Mark Borchardt, through the Marshfield Clinic. And through these studies the DNR Chief Public Water Supply Specialist Lee Boushon established the disinfection rule.

Since the establishment of the disinfection rule the U.S. EPA has given out numerous grants for the study of viruses in ground water into which no conclusions on the impact of public health has been made and because the findings are unknown.

We also would like to bring to your attention that attempts were made to culture the viruses to see if they were infectious and none of the samples were found infectious and thus not proven to be a threat to public health. This information was obtained from a report conducted by Mark A Borchardt 2004 5937 and an article in Science Dailey.

We are in support of the Senate Bill 19 to repeal the Department of Natural Resources' requirement that municipalities provide continuous disinfection of our water supply.

Sincerely,

Guy Williams, Village President

Darryl Ince, Director of Public Works

**Table 2-5
Iron and Manganese Levels**

Element	Well No. 1	Well No. 2	Well No. 3	DNR Standard (SMCL)
Iron (mg/l)	0.080	0.000	0.250	0.300
Manganese (mg/l)	0.220	0.047	0.740	0.050
Flow (gpm)	290	155	300	

The Village does receive occasional "black water" complaints in the area of Pine Crest, and this area is flushed every couple of months.

The water is classified as "hard," varying from 120 mg/l to 160 mg/l as calcium carbonate hardness.

In the summer when the temperature of the water in storage is higher because of the warm weather, the Village occasionally has an unsafe water sample. For this reason, the Village chlorinates the water in the summer as needed. This sometimes results in an objectionable taste to the water.

2.6 Water Treatment

The Village of Balsam Lake currently does not treat their water supply, except for adding hydrofluorosilicic acid for dental health. As mentioned in the above section, sodium hypochlorite (liquid chlorine) is added during emergencies when unsafe water samples are collected during the summer months.

Iron and manganese concentrations in the water are at levels where treatment may be considered. The iron levels are at or below the SCML; manganese is at or above the SMCL.

Sequestering is a chemical treatment process commonly used to address iron and manganese. In this process, a chemical (typically polyphosphate or orthophosphate) is added to the water to bind up the iron and manganese in a state where it is not objectionable. Sequestering is not considered a viable option for the Village because the manganese levels are too high (greater than 0.100 mg/l).

Addition of chlorine to the water will cause serious concerns with manganese related problems. Chlorine oxidizes manganese, which changes it to a form with undesirable characteristics such as brownish-black staining of clothing and fixtures and an unpleasant taste. The chlorine will also oxidize the iron to an extent.

Mechanical treatment methods for removing iron and manganese include oxidation or clarification followed by filtration, ion exchange, and greensand filtration. All methods result in a waste stream through backwashing or regeneration.

For all mechanical treatment methods, it would be desired to transmit the raw water to a central location for treatment. This would require nearly 2 miles of

raw water piping and construction of a water treatment facility likely adjacent to Well No. 1 or No. 2.

The budgetary cost for a water treatment plant would be approximately \$2.0 to \$2.5 million. Connecting water main would cost approximately \$85,000. The entire project cost including soft costs (engineering, financing, legal, etc.) and contingencies would be in the range of \$3.0 to \$3.5.

2.7 Well Pump Evaluation

2.7.1 Well No. 1

Well No. 1 is located adjacent to Tuttle Street in the Village Park. The reported capacity is 290 gpm, and the motor horsepower is 20. The well house is not equipped with emergency power. The static water level is 15 feet below the ground surface (bgs). The pumping water level is 24 feet bgs. The specific capacity is 32.2 gpm/foot of drawdown.

2.7.2 Well No. 2

Well No. 2 is located adjacent to First Avenue in the Village Park. The reported capacity is 155 gpm, and the motor horsepower is 10. The well house is not equipped with emergency power. The static water level is 18 feet below the ground surface (bgs). The pumping water level is 26 feet bgs. The specific capacity is 19.4 gpm/foot of drawdown.

2.7.3 Well No. 3

Well No. 3 is located on Mallard Lane in the Industrial Park. The reported capacity is 300 gpm, and the motor horsepower is 30. The well house is not equipped with emergency power. The static water level is 70 feet below the ground surface (bgs). The pumping water level is 125 feet bgs. The specific capacity is 5.5 gpm/foot of drawdown.

2.8 DNR Annual Inspection

On January 16, 2007, the Department of Natural Resources (DNR) conducted its annual inspection of the Village of Balsam Lake Waterworks Facilities. The DNR found that generally, the system's operation and maintenance is very good.

The first area of concern is regarding cross connection control inspections at larger commercial and industrial facilities. The Village does not currently have a cross connection control ordinance. Information on cross connection control ordinances is included in Appendix A.

The second area of concern was in accurately monitoring the levels of hydrofluorosilicic acid used at each well. The DNR recommended installing scales so that the amount of chemical used could be monitored to the nearest tenth of a pound.

The third item listed as a concern is that the hydrofluorosilicic acid at each well house be moved to a separate room to avoid electrical problems due to the corrosive fumes. At a minimum, the hydrofluorosilicic acid shall be vented to the atmosphere at a point outside of Well Houses No. 1 and 2 by March 1, 2007. Hydrofluorosilicic acid fumes are very corrosive and can cause electrical problems.

Resolution No. 2011-3

Support of Bill LRB-0937 Repealing Drinking Water Disinfection Mandate

WHEREAS, the Village of Woodville is concerned about the Wisconsin Department of Natural Resources requirement for continuous disinfection of municipal water systems; and

WHEREAS, the municipal water system in the Village of Woodville is of high quality, colorless, great tasting, and free of bacterial or viral contaminants; and

WHEREAS, the Village of Woodville is in support of Bill LRB-0937 Repealing Drinking Water Disinfection Mandate; and

WHEREAS, the Village of Woodville feels that the DNR should be prohibited from mandating continuous disinfection of all municipal water systems served by groundwater; and

WHEREAS, Federal law does not contain a similar requirement; and

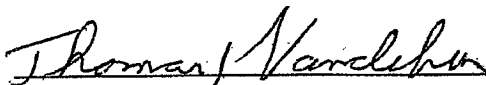
WHEREAS, none of our neighboring states, except Illinois, require mandatory disinfection of municipal water systems served by groundwater; and

WHEREAS, complying with the mandatory disinfection rule will force communities to purchase new equipment and require an annual on-going maintenance cost and the burden of paying these additional costs will fall on municipal water customers; and

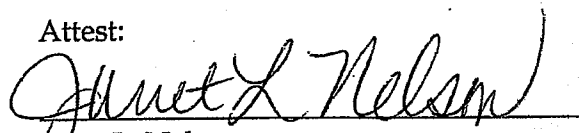
WHEREAS, our property owners cannot afford additional costs during these hard economic times.

NOW THEREFORE, BE IT RESOLVED that the Village of Woodville does hereby request that Legislators approve the bill, LRB-0937 which would delete NR 810.09(2) from the law.

Passed and adopted this 8th day of February, 2011.


Thomas J. Vardeberg, Village President

Attest:


Janet L. Nelson
Clerk Treasurer

PWS_NAME	POPULATION	ACTIVE WELLS	Senate	Assembly
BRUCE WATERWORKS	1532	2	Galloway	Williams
LADYSMITH WATERWORKS	10854	3	Galloway	Williams
SHELDON WATER UTILITY	520	2	Galloway	Williams
GLEN FLORA WATERWORKS	92	1	Galloway	Williams
TONY WATERWORKS	105	1	Galloway	Williams
EXELAND WATERWORKS	260	1	Galloway	Williams
WESTBORO SAN DIST 1	300	2	Galloway	Williams
KEWASKUM WATERWORKS	16836	4	Grothman	LeMahieu
ELLSWORTH WATERWORKS	5688	2	Harsdorf	Knudson
PRESCOTT WATERWORKS	12138	3	Harsdorf	Knudson
BALDWIN WATERWORKS	6602	2	Harsdorf	Murtha
HAMMOND WATERWORKS	3228	2	Harsdorf	Murtha
ROBERTS WATERWORKS	2646	2	Harsdorf	Murtha
WOODVILLE WATERWORKS	2636	2	Harsdorf	Murtha
STAR PRAIRIE WATERWORKS	644	1	Harsdorf	Murtha
BALSAM LAKE WATERWORKS	3093	3	Harsdorf	Severson
CLEAR LAKE WATERWORKS	2122	2	Harsdorf	Severson
DRESSER WATERWORKS	1750	2	Harsdorf	Severson
FREDERIC WATERWORKS	4964	4	Harsdorf	Severson
LUCK WATERWORKS	2560	2	Harsdorf	Severson
MILLTOWN WATERWORKS	1830	2	Harsdorf	Severson
AMANI VILLAGE SANITARY DIST	200	2	Harsdorf	Severson
SOMERSET WATERWORKS	3472	2	Harsdorf	Severson
SIREN WATERWORKS	1976	2	Harsdorf	Severson
WEBSTER WATERWORKS	1370	2	Harsdorf	Severson
LAKE LAND SANITARY DIST 1	7143	3	Holperin	Meyer
THREE LAKES SANITARY DISTRICT	1200	2	Holperin	Meyer
CRANDON WATERWORKS	3916	2	Holperin	Mursau
WABENO SANITARY DIST 1	1500	2	Holperin	Mursau
WHITE LAKE WATERWORKS	702	2	Holperin	Tiffany
TOMAHAWK WATERWORKS	7540	2	Holperin	Bewley
PORT WING WATERWORKS	800	2	Jauch	Bewley
DRUMMOND SANITARY DISTRICT	250	1	Jauch	Bewley
IRON RIVER SANITARY DISTRICT	1200	2	Jauch	Bewley
WASHBURN WATERWORKS	4560	2	Jauch	Bewley
RADISSON WATERWORKS	448	2	Jauch	Bewley

BARRON LIGHT & WATER DEPT	13228	4 Jauch	Rivard
CAMERON WATERWORKS	3366	2 Jauch	Rivard
CHETEK WATERWORKS	3862	2 Jauch	Rivard
CUMBERLAND WATERWORKS	9244	4 Jauch	Rivard
RICE LAKE WATERWORKS	33200	4 Jauch	Rivard
STONE LAKE SANITARY DISTRICT	175	1 Jauch	Rivard
BIRCHWOOD WATERWORKS	562	1 Jauch	Rivard
SHELL LAKE WATERWORKS	2736	2 Jauch	Rivard
TROY SANITARY DISTRICT 1	170	1 Kedzie	Nass
EAGLE WATERWORKS	5184	3 Kedzie	Nass
ADAMS WATERWORKS	3694	2 Lassa	Krug
FRIENDSHIP WATERWORKS	781	0 Lassa	Krug
WATERFORD WATERWORKS	19392	4 Lazich	Vacant - Gunderson
EAST TROY S D 3	40	1 Lazich	Vacant - Gunderson
ST NAZIANZ WATERWORKS	1500	2 Leibham	Ziegelbauer
FALL RIVER WATERWORKS	2726	2 Miller	Ripp
FRIESLAND WATERWORKS	311	1 Miller	Ripp
DANE WATERWORKS	1908	2 Miller	Ripp
LAKE HALLIE WATERWORKS, VILLAGE OF	10500	3 Moulton	Bernier
FALL CREEK WATERWORKS	2644	2 Moulton	Bernier
DALLAS WATERWORKS	730	2 Moulton	Larson
NEW AUBURN WATERWORKS	570	1 Moulton	Larson
COLFAX WATERWORKS	3465	3 Moulton	Larson
WHEELER WATERWORKS ASSOC	317	1 Moulton	Larson
HOLLANDALE WATERWORKS	566	2 Schultz	Marklein
MINERAL POINT WATERWORKS	5412	2 Schultz	Marklein
LONE ROCK WATERWORKS	1790	2 Schultz	Marklein
BLUFFVIEW SANITARY DISTRICT	900	2 Schultz	Marklein
SPRING GREEN WATERWORKS	3104	2 Schultz	Marklein
STITZER SANITARY DIST 1	150	1 Schultz	Tranel
BLOOMINGTON WATERWORKS	682	1 Schultz	Tranel
NORTH CAPE SAN DIST	170	1 Wangaard	Vos
MARYVILLE SD 2	100	1	



WISCONSIN LEGISLATIVE COUNCIL

Terry C. Anderson, Director
Laura D. Rose, Deputy Director

TO: REPRESENTATIVE ERIK SEVERSON

FROM: Rachel Letting, Senior Staff Attorney

RE: Assembly Amendment ___ (LRBa0591/1) to 2011 Assembly Bill 23, Relating to Disinfection of Municipal Water Supplies

DATE: March 28, 2011

At your request, this memorandum describes Assembly Amendment ___ (LRBa0591/1) to 2011 Assembly Bill 23, relating to disinfection of municipal water supplies.

Current Law

Under current law, the Department of Natural Resources (DNR), after a public hearing, is required to: (1) prescribe, publish, and enforce minimum reasonable standards and methods to be pursued in obtaining pure drinking water for human consumption; and (2) establishing all safeguards deemed necessary in protecting the public health against the hazards of polluted sources of impure water supplies intended or used for human consumption. [s. 280.11 (1), Stats.] The DNR is authorized to establish, administer, and maintain a safe drinking water program no less stringent than the requirements of the Safe Drinking Water Act. [s. 281.17 (8) (a), Stats.] Under this statutory authority, the DNR promulgated ch. NR 810 – Requirements for the Operation and Maintenance of Public Water Systems.

In the 2009-10 legislative session, the DNR under Clearinghouse Rule 09-073 proposed numerous changes to administrative rules relating to safe drinking water, design requirements for community water systems, and to ch. NR 810. Included in the changes to ch. NR 810 was a new provision which requires municipal drinking water systems, by December 1, 2013, to provide continuous disinfection of the water prior to entry to the distribution system. This modified rule became effective on December 1, 2010.

The Bill

The bill creates a new provision which specifies that, notwithstanding the statutes listed above, the DNR is prohibited from requiring a municipal water system to provide continuous disinfection of the water that it provides, unless continuous disinfection is required under federal law.

The Amendment

The amendment modifies the prohibition in the bill to provide that the DNR is prohibited from requiring a municipal water system to provide continuous disinfection of the water that it provides, unless one of the following applies:

- Continuous disinfection is required under federal law.
- Water quality data, well construction, or water system construction indicate a potential health hazard.

The amendment also adds a provision to the bill regarding the priority list DNR must establish to rank each safe drinking water loan program project. The amendment specifies that for the purpose of ranking safe drinking water loan projects, in addition to the current requirements, the DNR is required to treat a project to upgrade a public water system to provide continuous disinfection of the water that it distributes as if the public water system were a surface water system that the federal law requires to provide continuous disinfection. According to DNR staff, this language is intended to maintain the status quo regarding the ranking of safe drinking water loan projects.

If you have any questions, please feel free to contact me directly at the Legislative Council staff offices.

REL:ksm:wu